Docket No. SPO.124 Serial No. 10/561,022

In the Claims

This listing of claims will replace all prior versions and listings of claims in this application.

1 (cancelled).

- 2 (currently amended). The method, according to claim 1, wherein said method is used to screen A method of screening for a sample that activates the intestinal tract immune system, wherein the method-comprises comprising the steps of:
- (a) assessing whether a plurality of test samples activate the intestinal tract immune system by the assessment method of claim 1; and contacting a test sample with an isolated cell expressing a TLR9 encoded by a DNA comprising the nucleotide sequence shown in SEQ ID NO: 1;
- (b) measuring activity of the TLR9 using signal transduction in the cell as an indicator; and (b)(c) selecting from the plurality of test samples those assessed to activate the intestinal tract immune-system-the test sample as a sample that activates the intestinal tract immune system if the activity of the TLR9 is increased as compared to activity of the TLR9 in a cell not contacted with the test sample.
- 3 (currently amended). A method for producing a pharmaccutical composition that activates the intestinal tract immune system, comprising the steps of claim 2, and a further step of mixing the sample assessed to activate selected as a sample that activates the intestinal tract immune system with a pharmaceutically acceptable carrier.
 - 4 (cancelled).
- 5 (currently amended). The method, according to claim 4, wherein said method is used to sereen A method of screening for microorganisms that activate the intestinal tract immune system, comprising the steps of:
- (a) assessing whether a plurality of test microorganisms activate the intestinal tract immune system by the assessment method of claim 4; and preparing an extract from a test microorganism;

- (b) contacting the extract with an isolated cell expressing a toll-like receptor 9 (TLR9) encoded by a DNA comprising the nucleotide sequence shown in SEQ ID NO: 1;

 (e) measuring activity of the TLR9 using signal transduction in the cell as an indicator; and
- (e) measuring activity of the TLR9 using signal transduction in the cell as an indicator; and
 (d) selecting the test microorganism as a microorganism that activates the intestinal tract
 immune system if the activity of the TLR9 is increased as compared to activity of the TLR9 in a cell
 not contacted with the extract
- (b) selecting from the plurality of test microorganisms one or more microorganisms that are assessed to activate the intestinal tract-immune-system.
- 6 (currently amended). A method for producing a food composition that activates the intestinal tract immune system, comprising the steps of claim 5, and then mixing one or more microorganisms selected in part [[(b)]](d) of claim 5 with a dictarily acceptable carrier.
- 7 (previously presented). The method of claim 6, wherein the one or more microorganisms are lactic acid bacteria.

8-11 (canceled).

- 12 (currently amended). The method of claim [[1]]2, wherein the intestinal tract tissue is intestinal lymphoid tissue.
- 13 (original). The method of claim 12, wherein the intestinal lymphoid tissue is Peyer's patch or intestinal lymph node.
- 14 (currently amended). The method of claim [[1]]2, wherein the Toll-like receptor is derived from swine

15 (currently amended). The method of claim [[1]] $\underline{2}$, wherein the Toll-like receptor is Toll-like receptor 9.

16-21 (cancelled).

22 (previously presented). The method, according to claim 6, wherein the dietarily acceptable carrier is a dairy product.

23 (cancelled).